LYBESS
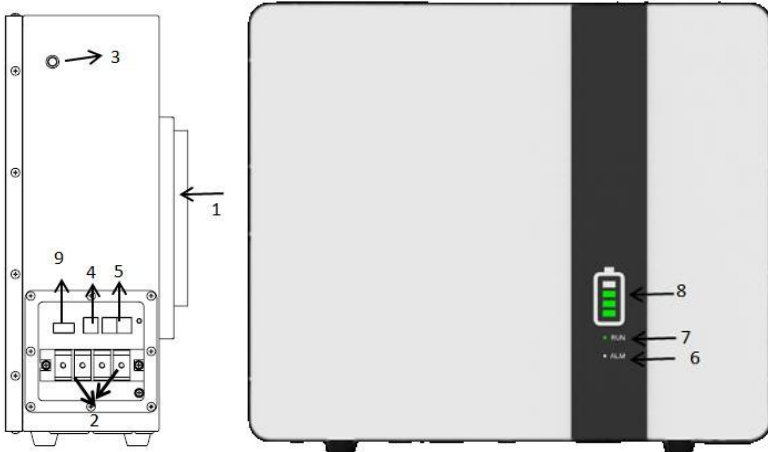# Installation Manual
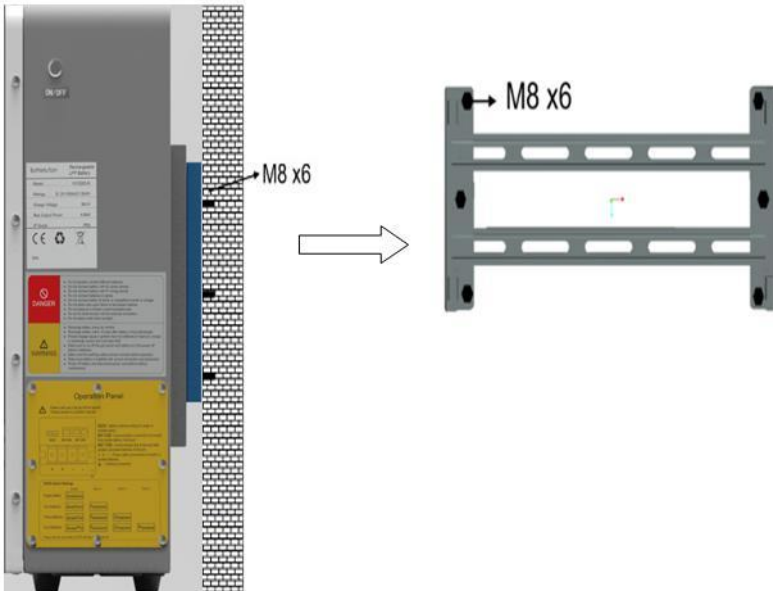VERSION 1.0

For
LFP Wall 2500

1. Front panel introduction

(1) Wall mount
Please mount bracket on the wall by six M8 bolts firstly. Then lift battery and stuck with bracket.

(2) Wiring block
2P (1P positive and 1P negative) power interface, printed by "+" and "-", front-mounted wiring method, positive and negative terminals are insulated by thermoplastic polyester (PBT) insulating sheets.
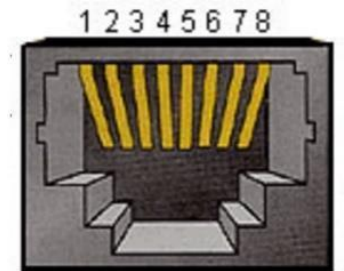
(3) Switch
BMS switch, when it is turned off, the BMS can be put to sleep and the charge and discharge MOS transistors will be turned off at the same time; normal operation will be restored after it is turned on. Note: Please do not turn on the system switch when the product is not in use to avoid self-consuming the lithium battery.

Version 1: CAN2.0B/RS485
(4) CAN2.0B COMM to inverter
BMS supports the function of CAN communication for battery pack uploading, baud rate of 500K. CAN communication interface adopts 8P8C network cable interface. It can communicate with inverter or CAN TEST through CAN interface. When the battery pack is connected, RS485 communication is connected, the data, status and information of the attery pack can be uploaded to PCS through CAN communication. CAN communication interface definition:

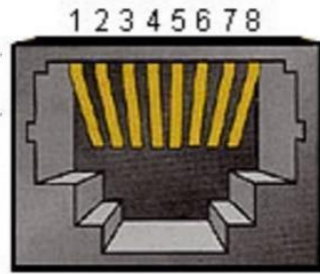| Pins	Definition
1、2、7、8	NC
4	CAN-H
5	CAN-L
3、6	GND

1. Front panel introduction

(5) RS485 COMM to parallel battery
The BMS has RS485 communication for multiple battery pack collections, and the baud rate is 19200bps. RS485 communication interface adopts 8P8C network cable interface.

RS485 pin interface definition (RJ45-8P8C)

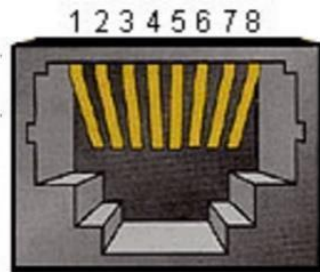| Pins	Definition
1、8	RS485-B
2、7	RS485-A
3、6	GND
4、5	NC

Version 2：RS485/RS485
(4) RS485 COMM to inverter
The BMS has RS485 communication for multiple battery pack collections, and the baud rate is 9600bps. RS485 communication interface adopts 8P8C network cable interface.

RS485 pin interface definition (RJ45-8P8C)

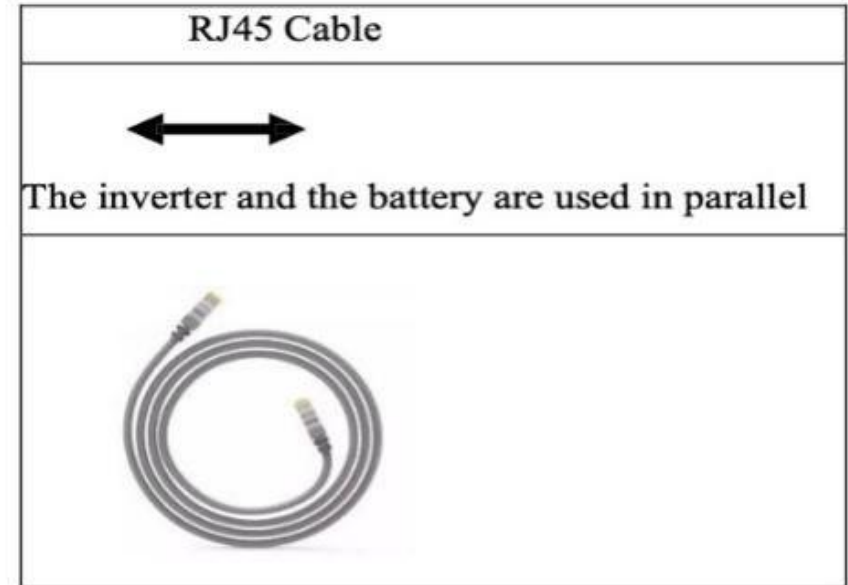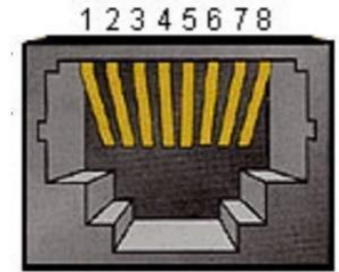| Pins	Definition
1、2、7、8	NC
4	RS485-A
5	RS485-B
3、6	GND

(5)RS485 COMM to parallel battery
The BMS has RS485 communication for multiple battery pack collections, and the baud rate is 9600bps. RS485 communication interface adopts 8P8C network cable interface.

RS485 pin interface definition (RJ45-8P8C)

Pins	Definition
1、8	RS485-B
2、7	RS485-A
3、6	GND
4、5	NC

RJ45 Cable

The inverter and the battery are used in parallel

1. Front panel introduction

(6) LED indicators

System	Status	RUN ●	ALM ●	SOC ●	●	●	●	Definition
switch on	sleeping	off	off	off	off	off	off	All off
standby	normal	on	off	SOC indicators				standby
Charging	normal	on	off	SOC indicators				Flashing
	OC ALM	on	Flashing	SOC indicators				Flashing
	OV ALM	on	off	SOC indicators				
	OT ALM	on	Flashing	SOC indicators				
Discharging	normal	Flashing	off	SOC indicators				SOC indicators
	alarm	Flashing	Flashing					
	All Protections	off	on	off	off	off	off	Fully discharged or 48 hours no instructions,going into sleep mode
	UV Protections	off	off	off	off	off	off	Stop discharge

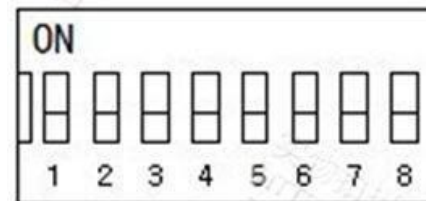(7) Red alarm indicator, normally off. And always on under fault conditions with beep.

(8) SOC indicator, four green LED lights to display the real-time SOC capacity of the lithium battery pack.

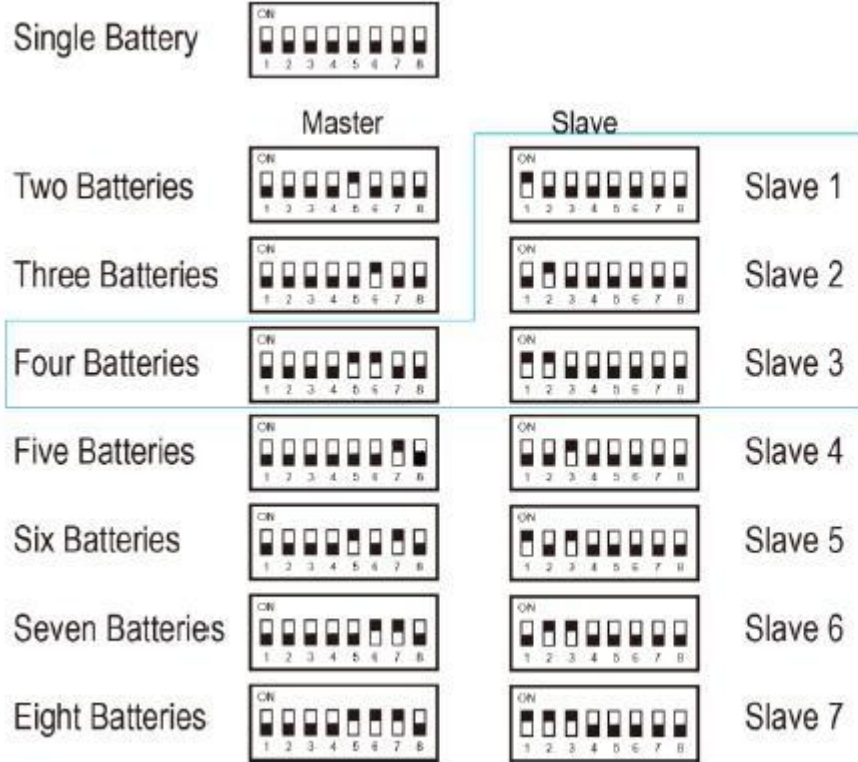| Status	Charge				Discharge			
SOC	L4●	L3●	L2●	L1●	L4●	L3●	L2●	L1●
0~25%	off	off	off	flashing	off	off	off	on
25~50%	off	off	flashing	on	off	off	on	on
50~75%	off	flashing	on	on	off	on	on	on
≥75%	flashing	on	on	on	on	on	on	on
RUN●	on				flashing			

(9) DIP Switches
Parallel DIP switch definition: For multi-battery communication when the battery packs are connected in parallel, use the DIP switch to distinguish different pack addresses, and the hardware address can be set by the DIP switch on the panel below.

LFP Wall 2500

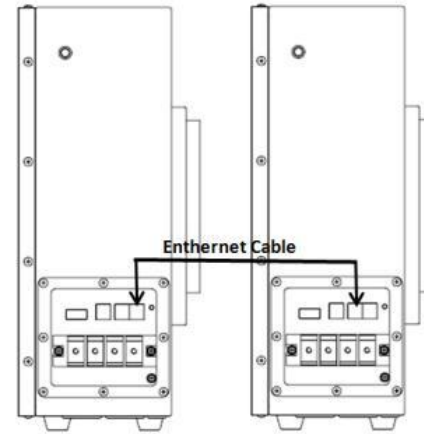# 1. Front panel introduction

(9) DIP Switches

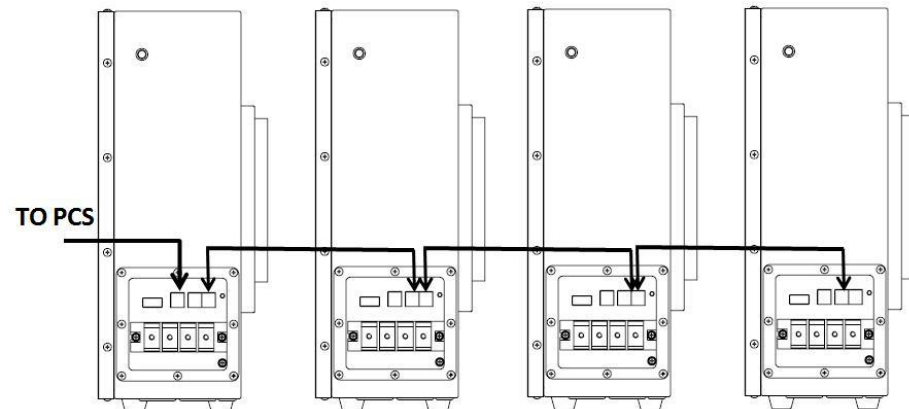For Example, blue frame is the settings for 4 batteries.

2. Parallel Communication

When multiple packs are connected in parallel, the RS485 interface is used as the parallel communication interface. The master pack can read the sum of the slave battery data of all parallel packs through the RS485 communication.

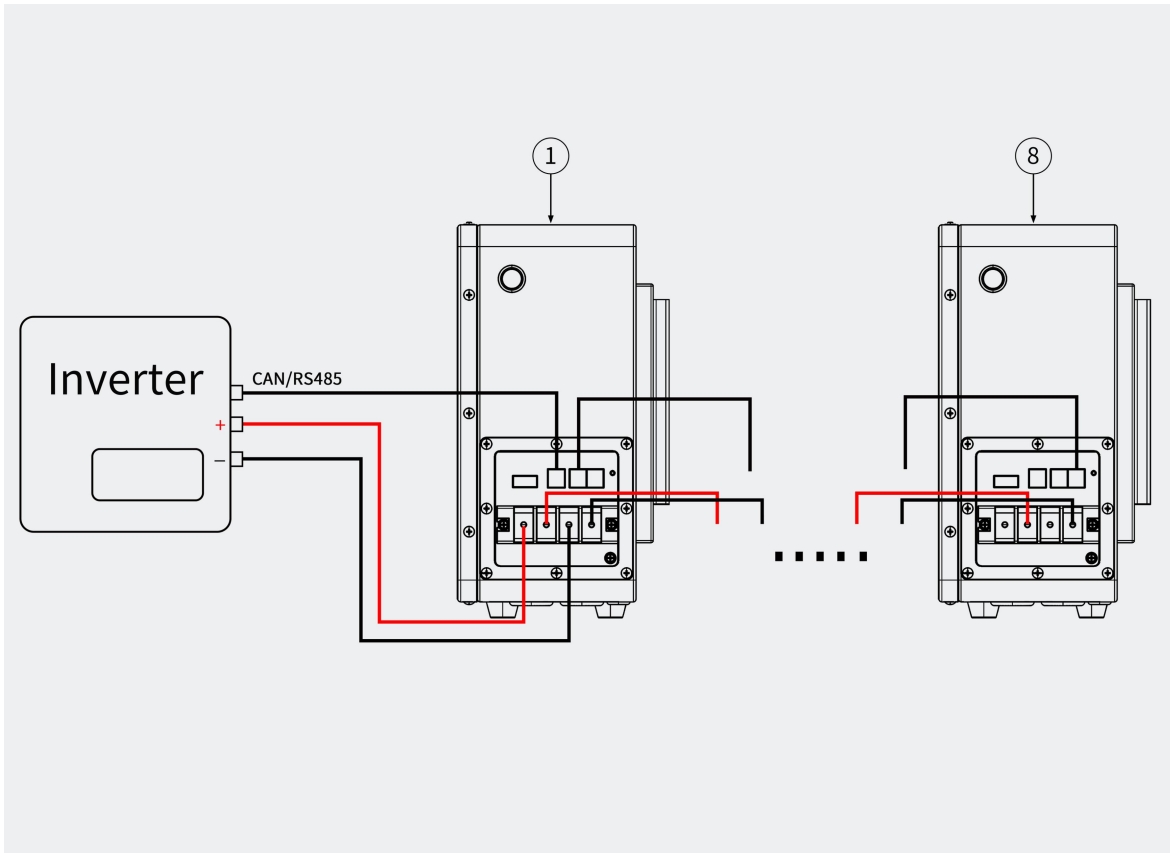**Two packs RS485 parallel connection 1：**

Enthernet Cable

More than two packs RS485 parallel connection 2：

TO PCS

3. Connect to the inverter

Before connecting cables to the system, ensure that the DIP switch number is set according to the preceding section.

Thank you for your reading. This Manual is only for the installation guide. Please refer to the User Manual for the use and warning of the product.

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